



Aviation Investigation Final Report

Location:	Marble Canyon, Arizona	Accident Number:	GAA20CA036
Date & Time:	October 18, 2019, 14:00 Local	Registration:	N49PD
Aircraft:	Titan TITAN TORNADO II	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during the takeoff roll, a "gust came up," and the airplane exited the runway to the right onto sand hummocks, and the landing gear collapsed. The airplane sustained substantial damage to the horizontal stabilizer. The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain directional control during takeoff in gusting wind conditions, which resulted in a runway excursion and impact with sand hummocks.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Gusts - Effect on operation
Environmental issues	Sloped/uneven terrain - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event)
Takeoff	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	65, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 1, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 9, 2018
Flight Time:	(Estimated) 694.7 hours (Total, all aircraft), 480.7 hours (Total, this make and model), 598 hours (Pilot In Command, all aircraft), 13.6 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 5.3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Titan	Registration:	N49PD
Model/Series:	TITAN TORNADO II Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	D98912SOHK0310
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	October 22, 2018 Condition	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	620 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	C91A installed, not activated	Engine Model/Series:	912UL
Registered Owner:	On file	Rated Power:	80 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPGA,4310 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	54°
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / 15 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:		Temperature/Dew Point:	21°C / -23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Marble Canyon, AZ (L41)	Type of Flight Plan Filed:	None
Destination:	Page, AZ (PGA)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Marble Canyon L41	Runway Surface Type:	Asphalt
Airport Elevation:	3603 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	3715 ft / 35 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.810832,-111.644447(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	James Brownwell; FAA; Las Vegas, NV
Original Publish Date:	May 21, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=100453

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